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ORIGINAL ARTICLES.

DERMOID TUMORS OF THE CONJUNCTIVA.

BY DR. S. C. AYRES, CINCINNATI, OHIO.

These tumors are congenital and are generally seen singly. Dr. Noyes reports an exceptional case where he saw three on one eye. They are usually located partly on the cornea and partly on the conjunctiva, but are occasionally seen on the conjunctiva alone. They do not give much annoyance until after the age of puberty when hairs begin to grow on them. The sweeping of the upper lid over the projecting hairs gives rise to some irritation requiring their extraction for relief. They vary in diameter from 3 m. to 6 mm.

Their removal is quite safe and should not be followed by any inflammatory reaction if proper protective precautions are taken for a few days after the operation. The eye should be kept bandaged until the denuded surface has quite thoroughly healed over.

The rarit his form of growth is my apology for presenting three

CASE I.—Mr. S., aged 24; has a large dermoid tumor of the right eye situated on the outer side. It is 6 mm. in diameter. Recently it has given him considerable annoyance and becomes inflamed when exposed to dust or wind. It has a few hairs growing from its center. It is quite flat and not so much elevated as the others I shall report. It was removed by seizing it with a pair of fixation forceps and then with a Graefe knife carefully dissecting it off the cornea and sclera. Pressure bandage was applied for a few days and the denuded surface healed over quickly.

CASE II.—J. J., mulatto; has a dermoid tumor of the eye which he considers unsightly and which occasionally annoys him. In other respects the eye is normal. A few black hairs grow from the center of the tumor, and its surface is dotted over with pigment points such as are seen on the conjunctiva of the mulatto.

Operation was recommended but to this he would not consent.

CASE III.—Mr. A., aged 25; has a dermoid tumor of the left eye which is annoying from the hairs which grow from its center and which have to be extracted occasionally. He also has a mole in front of the tragus of the left ear. The tumor is rounded and quite convex, and lies about equally on the cornea and sclera. There is a very narrow area of corneal opacity around the base of the tumor. It was excised without any re-

action following. A saturated opacity of the cornea marks the area covered by the tumor.

Dermoid tumors or moles of the eyeball are associated with coloboma of the eyelids. Sutton, in his work on "Tumors, Innocent and Malignant, explains their development in the following way: "In the embryo the tissue covering the outer surface of the eyeball, which ultimately becomes the conjunctiva is directly continuous, and in structure is identical with the skin at the margin of the orbit. Very early cutaneous folds arise, gradually grow over the surface of the eyeball, and come into apposition at a spot corresponding to the future palpebral fissure. These folds ultimately become the eyelids. The surface of these folds, which are continuous with the covering of the eyeball, become converted into mucous membrane, and are termed conjunctiva. It is reasonable to suppose that, as the occlusion of the proper covering of the eyeball by the eyelids is the cause of the conversion of the conjunctiva into mucous membrane, if from any cause a part, or even the whole of it, were left uncovered, the exposed part would persist as skin."

He further states that "conjunctival moles have been observed in horses, sheep, oxen and dogs, and are furnished with hair or wool according to the nature of the tegumentary covering characteristic of the mammal in which they occur."

SOCIETY PROCEEDINGS.

SIXTY-THIRD ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD IN LONDON JULY 30, 31, AND AUGUST 1 AND 2, 1895.

SECTION OF OPHTHALMOLOGY.

INTRODUCTORY REMARKS

BY HENRY POWER, M.D., F.R.C.S.,

President of the Section.

After the warm expressions of welcome that have been addressed to the members of the Congress generally by the President little remains for me to add except that the ophthalmologists of London in a more special manner greet with a friendly grasp of the hand all those who are practicing this important department of medicine in other cities and towns of Great Britain or who have come to visit us from other countries. I am sure I am expressing the sentiments of the metropolitan members of this Congress when I say that we feel ourselves highly honored by their presence on this occasion, and that we trust they will not only derive profit from the numerous papers on interesting subjects that have been promised to us, but that they will receive some pleasure from the various objects of interest to be found in this great city and its vicinity. Half a century ago no such friendly situation could have been offered, because ophthalmology, though full of vitality, had not yet reached the stage of separate existence, but was still

merged in general surgery, few or none practicing it with exclusiveness.

Within that period, however, great changes have occurred. Affections formerly lightly passed over or altogether disregarded have been found to require for their elucidation prolonged ond careful inquiry, and new means and methods of research have been added to our previous stock. The ophthalmoscope invented by Helmholtz, the distinguished physicist and physiologist, whose loss we have had so recently to deplore, opened up a vast field of study, and the revelations obtained by its employment of the changes in the intra-ocular structures is by no means exhausted. The investigation of errors of refraction and their correction in the path pursued by Donders and his school and still further developed by Landolt and others; the study of muscular anomalies and defects, so energetically worked at by our American coadjutors; the recognition of the immense practical importance of good color vision in all forms of land and sea conveyance where the traffic is regulated by colored signals; the labors of a host of clinical observers both at home and abroad in devising and perfecting methods of treatment both operative and medicinal; the gradual recognition of the fact that many constitutional diseases, as albuminuria, diabetes, leukæmia, and febrile affections generally powerfully influence vision, are all circumstances that have contributed to enlarge the horizon and to develop the resources of the ophthalmologist to an extraordinary degree. This again has led to the establishment of several special hospitals devoted entirely to the treatment of diseases of the eye, and also to the founding of departments with the same object in view in connection with each and all of our general hospitals. To discharge the duties connected with these institutions professors have been appointed, who have required the services of assistants and house-surgeons, and these in turn have been able to instruct a large number of intelligent and diligent students, and thus a sound knowledge of the nature and treatment of eye diseases has been diffused throughout the kingdom, so that whereas only a decade or two ago the unfortunate victim

of iritis or of keratitis, of squint, cataract, or glaucoma was compelled to come to one of the great centers of population, at the present time there are few towns even of very moderate size that do not possess either an ophthalmic surgeon or a practitioner capable of diagnosing and treating any of the ordinary forms of ophthalmic disease.

The foundation of the Ophthalmological Society of Great Britain has proved of the greatest service by enabling remarkable cases to be seen by all who are interested in the subject; by supplying a field where papers can be read in which new views can be advocated, or old ones subjected to wholesome criticism, and in which an *esprit de corps* can be fostered, and a fellow feeling established amongst men who have no petty jealousness, and who seek success only by honorable rivalry.

Our branch of work is by common consent the most fortunate of all in the opportunity it affords of applying methods founded on pure science to the diagnosis and treatment of disease; and so long as our ranks are recruited by those who have gone through the ordinary curriculum of medicine and surgery now required by the examining bodies, and so long as it is recognized by the profession generally that an accurate knowledge of ophthalmology will often supply the key to many constitutional affections, we need have no fear that it will separate itself from the main trunk, or become a barren branch. But this does not the less relieve us from the necessity of constantly keeping in view the scientific side of its study, and I am strongly of opinion that all those who enter the ophthalmic department to pursue it as a special study should have gone through a sound mathematical training. At the present moment this is certainly not a *sine qua non* for a candidate applying for any post at an ophthalmic hospital; but I am sure that if it were made so, it would prove of great advantage to the rising generation of ophthalmologists; that the practical work of correcting errors of refraction would be better done, and that under any circumstances it would be an efficient means of mental training.

Though the organ with which we are engaged is but small,

it is yet a theatre large enough to permit many pathological processes to be followed out, which, owing to the diversity of tissues present, are more various, and can be defined with greater precision than elsewhere; and where different modes of treatment can be strictly compared and their relative value estimated. Our diagnosis of disease is daily becoming more precise, as is shown by the circumstance that in 1842 Dr. Hockin, tabulating the statistics of six infirmaries, found that of 30,971 cases of ophthalmic disease, 16,383—or more than half—were cases of conjunctivitis, a large proportion of which would now be distributed under very different heads. No doubt much remains to be done; there are many gaps and imperfections in our knowledge. Let us hope that some of these may be filled up and removed in the labors to which we will now address ourselves.

CASE OF ACROMEGALY WITH OCULAR COMPLICATIONS.

BY A. H. BENSON, F.R.C.S.I.,

Ophthalmic and Aural Surgeon City of Dublin Hospital.

The patient was a man, aged 38, who after an injury to his leg nine years before, began to grow lazy, sleepy, and big; the sight had been affected for two or three years. There was no diathesis, either hereditary or acquired. He was a heavy smoker, had a central scotoma for colors, and a bitemporal color defect. His vision was $^{6}/_{LX}$ in each eye. After giving up smoking and taking iodide of potassium, vision was again $^{6}/_{VI}$, and remained good for two years. He then took to smoking again, and in two months vision was reduced to $^{5}/_{LX}$. At this time he presented the characteristic appearance of acromegaly, and there was irregular bitemporal hemianopsia. Thyroid extract tabloids were ordered, but the next day vision

was reduced to perception of light; fresh thyroid extract was given, and within seven weeks the vision was again $^{6}/_{VI}$. He diminished in weight, and the field of vision had improved.

DR. MEYER (Paris) mentioned three cases of acromegaly that had come under his observation. One was without ocular symptoms; the other two had diminution of central vision to $^{6}/_{XII}$ and $^{6}/_{XVI}$. Complete temporal hemianopsia, with slight decoloration of the optic discs. In one of the cases the characteristic sign of acromegaly were accompanied by pronounced tabetic symptoms; in the other the general health, with the exception of the acromegaly, was perfect. His patients were still living, but the results of the necropsies that had been made gave very different results; in some the pituitary body was altered, in others not. The most remarkable feature of Mr. Benson's case was the restoration of vision after its nearly absolute abolition.

DR. SWANZY (Dublin) pointed out that the disease, although only recently described, was not a modern one, inasmuch as marked signs of it were present in the skeleton of the Irish giant Cornelius Magrath, preserved in the museum of Trinity College, Dublin. He lived in the early part of the last century, and it was only about two years ago that a careful examination of the skeleton proved that the giant had been the subject of acromegaly; the sella turcica was so dilated that a small walnut could be placed in it; the groove for the chiasma had disappeared, as also the posterior clinoid processes.

DR. LITTLE (Manchester) had seen only one case of acromegaly associated with eye symptoms. A gentleman, aged about 30, consulted him about eighteen months ago with failing sight of the left eye of three or four weeks' duration. The vision was equal to $^{6}/_{XVIII}$, refraction normal; optic nerve pale as compared with the other, but that was doubtful. Other eye normal. A month afterwards there was distinct atrophic change in the optic nerve; no neuritis; field contracted upwards outwards. Two months later there was marked atrophy and vision=Jæger 20; the right eye was still normal.

PROFESSOR PANAS (Paris) said that the case observed

by him regarded a woman aged 35, affected with typical acromegaly, preceded by epileptic attacks. The disease was accompanied with hypertrophy of the thyroid gland. The urine contained a large quantity of sugar and albumen. The ocular trouble consisted in bitemporal hemianopsia, the separation line being placed precisely in the middle of the visual field; proof that compression due to the enlargement of the hypophysis, weighed on the posterior angle of the chiasma. He considered that the acromegaly was due in that case to an alteration of the central nervous system, which produced the enlargement of the thyroid gland, and hypophysis, diabetes with albuminuria, and the epileptic attacks at the first stage of the disease.

PROFESSOR FUCHS (Vienna) said the central scotoma in Mr. Benson's case might be due not to tobacco amblyopia, but to a connection with the hemiopia. He had seen a case, which was supposed to be a tumor of the intracranial part of one optic nerve, spreading over to the other half of the chiasma. There was complete blindness in one eye, and temporal hemiopia in the other; this hemiopia was preceeded by a central scotoma, which disappeared later on, and normal vision was restored. He thought that the scotoma was due to the inflammatory œdema which is so often found in the neighborhood of the tumor. This œdema might have caused a transient functional trouble in the papillo-macular bundle, which is especiallp liable to be implicated in pathological conditions of the various kinds.

DR. HILL GRIFFITH (Manchester) had had for some years a well-marked case, which had recently died under the care of a medical friend, and showed a large sarcomatous tumor of the pituitary body. There was nothing especially of interest in the form of the field defect; by pressure on the chiasma in other conditions, there might be blindness of the eye with temporal hemianopsia for form or only for color, and so forth. He had also seen one other case under the care of a colleague, and one or two others had been shown him by medical friends.

MR. SNELL (Sheffield) had seen one case of well-marked

acromegaly in a man. There was at that time an absence of eye symptoms: the field of vision for white and colors was normal, and vision was not impaired. The patient had not been examined for twelve or more months, but he was still living. Mr. Benson's case taught the lesson of repeatedly, in such a case, taking the field.

ON INJECTING CHLORINE WATER INTO THE VITREOUS.

MR. G. A. BERRY (Ophthalmic Surgeon to the Edinburgh Royal Infirmary) gave the results of his further experiments on the injection of chlorine water into the vitreous. His method of operating was to make an incision through the conjunctiva at the equator between the inferior and external recti tendons; a Græfe's knife was then plunged through the denuded sclera. The nozzle of a hypodermic syringe was next introduced into the middle of the vitreous, and 4 minims of freshly-prepared chlorine water slowly injected. The wound was cleaned with chlorine water, and the conjunctiva drawn together by sutures. Moderate chemosis followed the operation, but no other harmful effect. Where purulent infiltration of the vitreous had already set in, the process was aggravated by the injection. He hoped that more experience would prove that these injections of chlorine water would prevent the beginning of septic inflammations in the eye, especially after the removal of pieces of metal from the eye.

DR. ARGYLL ROBERTSON had seen most of Mr. Berry's cases, and could corroborate the beneficial effects spoken of; he had employed it in one case in which the result was not satisfactory, owing to the already advanced state of suppuration present.

OPTOMETRY BY THE SUBJECTIVE METHOD.

DR. G. J. BULL (Paris) believed that the only satisfactory way of testing vision by the subjective method was first to find out the astigmia before correcting the spherical error. He

advocated the method of making the meridian of least refraction emmetropic; any astigmia then present resolved itself into simple myopic astigmia.

ESSENTIAL SHRINKING OF THE CONJUNCTIVA.

MR. C. G. LEE (Honorary Surgeon to the Liverpool Eye and Ear Infirmary) narrated a case in which the vision in both eyes was reduced to perception of light; the disease in the first eye being complicated with a cyst of the upper lid leading down to bare bone at the margin of the orbit.

CHOROIDAL SARCOMA IN INFANCY.

MR. JOHN GRIFFITH (Pathologist and Curator Royal Westminster Ophthalmic Hospital) narrated two cases which he considered to be undoubted instances of choroidal sarcoma—one in a child aged two and a half years, in which a section of the eyeball revealed a non-pigmented growth springing from the choroid; in the other, a child four years, a non-pigmented sarcoma completely filled the eye, and had penetrated through the ciliary region. Mr. Griffith believed sarcoma of the choroid to be more common at this period than was usually admitted; he upheld the view that glioma of the retina was a sarcoma, and objected to the term glioma of the retina.

HEREDITARY CONGENITAL NYSTAGMUS ASSOCIATED WITH HEAD MOVEMENTS.

MR. ANGUS MACGILLIVRAY (Ophthalmic Surgeon Dundee Royal Infirmary) narrated two series of cases, in one of which the nystagmus could be traced through four generations; the nystagmus was of the horizontal kind, and the head movements persisted throughout life. The affection seemed to be transmitted through females to male children. The movements in these cases seemed to form a connecting link between the infantile cases of head nodding and the tremors found in the aged.

MR. SNELL (Sheffield) said he did not know that miners' nystagmus could be regarded as hereditary, but he had often found it present in a father and his sons who were also miners. It probably only showed in these cases a tendency to the development of muscular disabilities.

MR. GEO. WALKER (Liverpool) had found considerable ametropia in several cases of nystagmus in which the movements had been much reduced on correcting the error of refraction. He suggested that the heredity of the nystagmus might depend on the presence of the ametropia.

MR. LLOYD OWEN (Birmingham) referred to two cases of family nystagmus recorded by him some years ago, in which the nystagmus descended to male children through the females; the only condition common to all members of the family was hypermetropia

EXHIBITS.

DR. KOSTER (Utrecht) described and demonstrated the use of his new Tonometer for measuring the tension of the eye.

PROFESSOR GAYET (Lyons) showed a series of Photographs illustrating the use of photography in recording the conditions of the eyes before, during, and after treatment.

A NEW THEORY OF ERYTHROPSIA.

PROFESSOR FUCHS (Vienna), as the result of his excursions into the snow-covered mountains near Vienna, came to the conclusion that erythropsia is a common occurrence in healthy eyes; he could produce it at will in patients who had had their lenses removed by sending them to walk in the snow. From the result of his experiments he had come to the conclusion that the erythropsia was produced by the visual purple becoming visible during its formation after exhaustion of it in the retina by long exposure to dazzling light.

THE TESTS FOR COLOR BLINDNESS.

DR. EDRIDGE-GREEN, after giving a summary of the known

facts of color blindness, went on to say that colored objects of different materials should be used as classification tests, and also colored lights, modified if necessary by neutral glasses, which altered the color of the light to the color blind but not to the normal sighted.

THE INFLUENCE OF THE CEREBRUM AND CEREBELLUM ON EYE MOVEMENTS.

DR. RISIEN RUSSELL, after dscribing his former work on this subject, went on to say that it was possible to demonstrate even in the dog and cat the existence of distinct foci in the cerebral cortex related to each simple movement of the eyes. With all the external ocular muscles intact the invariable result of excitation of the frontal eye area was the movement of both eyes to the opposite side; when this movement was excluded by dividing the external rectus of the opposite eye and the internal rectus of the eye on the side of the hemisphere stimulated, it became possible to demonstrate the existence of a focus, stimulation of which resulted in simple upward movement of the eyes. Further, after division of the muscles that raised the eye, a focus could be demonstrated, stimulation of which resulted in simple downward movement. Evidence was adduced to show that the true action of these centers in the cortex must be to initiate movement by their action on lower centers. The author went on to describe the effect on movements of the eyes of removing the lateral and middle lobes of the cerebellum.

ERRORS OF REFRACTION IN NEURASTHENIC WOMEN.

DR. H. MACNAUGHTON JONES read a paper on The Importance of Correcting Errors of Refraction in Neurasthenic Women, in which he stated that of 270 women who had consulted him for affections of their pelvic organs 53 complained of head symptoms. A large proportion of these suffered from varying degrees of hyperopic astigmatism; 28 were completely

cured or greatly relieved of their head symptoms by correction of their refractive error.

ON THE QUESTION OF LATENT HYPERMETROPIA IN THE VISUAL EXAMINATION OF CANDIDATES FOR THE PUBLIC SERVICES.

MR. W. M. BEAUMONT (Bath) in this paper pleaded for more definite regulations with regard to the question of latent hypermetropia in the examination of candidates for the public services.

THE SURGICAL TREATMENT OF DISLOCATION OF THE LENS INTO THE ANTERIOR CHAMBER.

DR. GEORGE MACKAY (Edinburgh) asked for the experience of his colleagues upon the question of what proportion of cases received permanent benefit from reduction of the dislocation. His own experience was in favor of the employment of a needle to fix and remove the lens from the path of the knife while making the corneal section, and to prevent its falling back into the vitreous whilst the vectis is being passed behind it.

MESSRS. PRIESTLY SMITH, DRAKE BROCKMANN, EMRYS JONES, and GEO. WALKER narrated their experience.

A NEW OPERATION FOR TRICHIASIS.

MR. KENNETH SCOTT (Cairo) described the operation which he had performed in its perfect form on 374 cases with invariable success, except in 9 cases where the eyelids had been deformed by previous operation.

EPISCLERITIS PERIODICA FUGAX.

BY PROFESSOR DR. ERNST FUCHS.

University of Vienna.

I mean by the name "episcleritis periodica fugax" a special form of frequently recurring inflammation of the eye, which attacks pre-eminently the conjunctiva and the episcleral tissue, runs its course without extensive exudation, and is of a very transitory nature. The symptoms of the disease are in many cases so characteristic that we can from the history alone, with great probability, diagnose the same. I think it best to relate some of the special characteristics of the 23 cases which I collected.

I will begin with one of the simplest cases. A man 24 years of age, had fourteen years ago for the first time an inflammation of the right eye, which lasted eight days. After eight days' interval the left eye became inflamed, likewise for eight days. Up to three years ago the inflammations repeated themselves, always in such a manner that, after intervals of two or three months, sometimes the right eye, sometimes the left, began to be inflamed, and that after a short intermission the other eye followed. Only twice were both eyes affected at the same time. In the last three years the disease has so far become milder that now only one eye becomes inflamed, and after an interval of two or three months the other. The cause of the relapses is unknown to the patient. During the inflammation the pain is insignificant (mostly on moving the eye), but severe photophobia is present, so that the patient during this time is unable to work. The man otherwise is in good health. As I once had the opportunity of observing the inflammation, I found it to consist of a coarse injection of the conjunctiva bulbi, and a particularly severe injection of the episcleral vessels. A sclerotic node was not present.

The following case shows us a patient with gouty predis-

position, in whom the traveling of the inflammation was distinctly to be seen, also the partaking of the ciliary body in the hyperæmia. The patient is a man aged 50, wealthy and living well, whose urine on cooling deposits a sediment, which consists of uric acid and oxalate of lime. The amout of uric acid is, in comparison, slightly increased, yet the patient has otherwise no gouty appearance or symptoms. The attacks of inflammation of the eyes have existed for five months; they last usually eight days, and travel from one eye to the other. When I saw the patient the inflammation began in the left eye on the outer side of the cornea, jumped from there to the inner side of the same eye, and then over to the right eye, where it first attacked the outer side of the eyeball. In the meantime the left eye had again assumed its normal pale appearance. The inflammation consists in a coarse net-like injection of the conjunctiva and a very intense injection of the underlying ciliary and episcleral vessels. The non-inflamed parts of the eyeball were perfectly pale, especially the conjunctiva of the fornix and of the lids. Pain was present with movement of the eye, and on accommodating. It was probably as the result of these pains that I found during the attack that the near point was removed about 40 centi-metres away, while during the intervals of freedom from an attack it was 25 centimetres. The refraction and acuteness of vision remained unchanged.

It more frequently happens, however, that the hyperæmia of the ciliary body leads to a spasm of accommodation, and therefore to an apparent myopia. This will be illustrated in the following case, which is, moreover, interesting on this account, that there comes here into play not the uratic diathesis, but intermittent fever as the cause of the disease, The patient is 31 years of age, and a laborer. He declars that in other respects he is perfectly healthy, and knows nothing of having passed through a fever. The internal examination showed, however, rather significant enlargement of the spleen. The patient has suffered since the year 1883 from inflammation, which alternately attacks both eyes. The attacks occur every

two or three weeks and lasted in the beginning only one to two days, later four to five, or even eight days; and while at first the eye during the attack was only reddened and not painful, there were present later severe pains, which radiated to the forehead, nose, and ear. The inflamed eye is also extremely sensitive to the touch. During the attack the patient sees as through a mist: he has also fever and great thirst. The patient showed himself for two years from time to time in the clinic, and was observed during several attacks. The inflamed eye showed conjunctival and ciliary injection, but was otherwise of normal appearance. Only the vision was diminished, and moypia was present. This varied according to the severity of the attack, amounting during the inflammation to 3 dioptrics; the vision was thereby reduced to $^{6}/_{XVIII}$. During the time of freedom from inflammation there was present emmetropia and vision $^{6}/_{VI}$. The treatment consisted in quinine, which did not abort the attack, but when the patient had taken quinine for a long time the attacks did not occur, so that there were intervals of two to three months. But as the patient always ceased to take the quinine on account of the expense, the attack soon returned.

The involvement of the deeper parts in the inflammation expressed itself also in the fact that the pains often become especially prominent with movement of the eye. Many patients can predict the onset of the attack in that by fixation of the finger held before the eye they experience pain in consequence of the accommodation and convergence. The inflammatory œdema can extend so far posteriorly that even exophthalmos arises.

It is quite frequent for the inflammation to be associated with a similar affection of the mucous membrane of the nose, and the inflammation of the eye frequently begins with a severe nasal catarrh, the predisposing cause of these attacks seems to be a cold.

The following case is a fair example of this kind; it also goes to show that the presence of uratic diathesis need not necessarily be the cause of the inflammation of the eye. A

man, 46 years of age, the owner of a large estate, has been since the year 1887 exceedingly sensitive to change of temperature. As soon as he exposes himself to such he acquires a severe acute nasal catarrh and inflammation of the eye.

In the first years he was so sensitive, that the mere taking hold of the cold doorknob, or the resting of his elbow on a marble plate was sufficient to make him sneeze thirty times in succession, and an acute nasal catarrh and inflammation of the eye soon followed. Also later, when the sensitiveness had diminished, it was sufficient to go out of a warm room into a cold one for these symptoms to appear. The patient is bald-headed, and a mere draught on his bald head is especially apt to produce the disease. Otherwise he can in all weather, summer and winter, remain outdoors on his estate, become heated or drenched, without catching cold. The examination of the nose showed a considerable thickening of the nasal mucous membrane, especially in the lower turbinates. These were repeatedly cauterised with the galvano-cautery, after which an improvement followed, which, however, was of short duration. The inflammation of the eye consisted in a severe reddening of the whole conjunctiva, especially the conjunctiva bulbi, which as a rule disappeared after twenty-four hours. The patient lives well, is well nourished, and has some increase of uric and oxalic acid in his urine; otherwise no gouty symptoms are present. All attempts at a cure proved unsuccessful, until he had, in the summer of 1894, the left upper canine tooth extracted. This tooth, the patient asserted, only appeared when he was 30 years old, and had come out of the palate posteriorly to the normal row of teeth, it had an unusually long root, but was otherwise healhty. Since the extraction of this tooth all these symptoms, even the sensitiveness to change of temperature, have disappeared completely.

I will not, gentlemen, take up your time any longer with histories of other cases, of which I could mention a considerable number. Those related by me are the most frequent types of the affection. The disease in question consists in a severe inflammation of the conjunctiva bulbi, but especially of the

underlying episcleral tissue. From acute conjunctival catarrh it differentiates itself by the absence of secretion and by limiting itself to the conjunctiva bulbi, of which at times only one quadrant is affected. From the usual episcleritis it is distinguished by the absence of any nodes and its very rapid disappearance, after which no traces of the disease are to be found. It consists chiefly in a severe inflammatory œdema of the episcleral tissue; the deeper structures often take part in the hyperæmia, as is shown sometimes by the presence of pains on accommodation, or movements of the eyeball; or spasm of the of the sphincter of the pupil which causes miosis, or a spasm of the ciliary muscle which produces transient myopia. The inflammation is frequently accompanied by severe photophobia, lachrymation, and pains; the latter often make their appearance before the inflammation, and denote its coming.

The duration of the inflammation is as a rule only a few days. The inflammations reappear at regular intervals, which last from several weeks to a few months. In the same case the disease may vary in its course, so that the attacks become more frequent and severe or, on the contrary, less frequent and milder. The duration of the disease is as a rule some years. After inquiry I find that only 7 of my 23 patients are now entirely cured; in one of these cases, however, the disease had lasted twenty years. The treatment in most cases of episcleritis fugax is powerless, as the long duration of the disease shows. With a diet suited for the uratic diathesis or with hydrotherapy one can at times produce an improvement, so far that the disease returns less often and gets milder. But more effective are quinine and salicylate of soda, each of these remedies having produced a complete and lasting cure in its case.

Episcleritis fugax is a rare disease; still I am sure that most of you have observed such cases. In fact the first two accurate descriptions which I find in the literature are given by English authors—namely, by Mr. Hutchinson and Mr. Nettleship. Mr. Hutchinson described this disease in his Bowman Lecture (1884) as a "hot eye." Mr. Nettleship also reported such cases before the Ophthalmological Society in 1888. Both

gentlemen believe that the disease is similar to recurrent iritis, ond eventually may pass into it, which, I must confess, I have never observed, even in the longest duration of the disease. I find that another case of this affection has been reported by Mr. Swan Burnett in 1892, who considers is as a vasomotor disturbance.

I have observed the disease most frequently in men of middle age, less often in women. Mr. Hutchinson and Mr. Nettleship claim gout to be the cause of the same: It is true that some of my patients are living in the best of circumstances, and that they excrete probably more uric acid than normal; however, they exhibited no pronounced gouty symptoms, and besides I must mention that typical gout is extremely rare in Austria. There were decided signs of rheumatism present only in one patient, who has had two acute attacs of rheumatism of the joints previous to his eye disease; instead there were indications of malaria in several cases. Although the patients had had no typical attacks of intermittent fever, still there was enlargement of the spleen present in a few cases, and in these as well as others quinine produced good effect. This drug was able to shorten an attack, or, when taken for a long time, prolong the intervals of freedom. In one case there was an immediate and entirely curative effect produced by the quinine. One must, however, not confuse the episcleritis fugax with a certain conjunctivitis, which was observed in cases of intermittent fever, with each attack or in place of the fever.

I must confess that for the large number of my cases no etiology could be found. I believe that the predisposition to this disease is caused by an abnormality of nutrition, such as gouty diathesis, malaria, and so forth. In consequence of the general disturbance, an accumulation of noxious substances takes place, which, when a sufficient amount is collected, would produce an attack of inflammation. The last provocation to such an attack is often produced by some external cause such as a change of temperature.

I thought I would first consider the disease as a vasomotor disturbance or of an angioneurotic nature, somewhat like

urticaria because one of my last cases was accompanied with urticaria. By the collection and investigation of the histories of my patients I assured myself, however, that the episcleritis differentiates itself from the angioneurotic affections; that the appearance far exceeds the simple non-inflammatory œdema; and that the attacks are of longer duration than is known of the vasomotor neurosis. As a vasomotor affection, I would like to consider transitory œdema of the lids which I have observed myself in several cases, and of which a large number of cases have been reported by others, also by English authors, as Mr. Ormerod, Mr. Jamieson, Mr. Doyne, Mr. Gunn, Mr. Collins and other.

MR. BERRY (Edinburgh) believed that this disease was known to all ophthalmologists, though probably under different names. It was probably the same disease as that described by v. Graefe. under the term "subconjunctivitis." It was not a conjunctivitis, as the secretion was not increased. It was possibly in some cases the prodroma of something more severe—iridocyclitis or scleritis.

DR. EMRYS JONES (Manchester) had had three cases of this disease, which agreed entirely with Professor Fuchs' account of it. One of them was very obstinate, and resisted all kinds of treatment, both local and general, for more than a year; he at last performed peritomy with great and lasting benefit. He had since done peritomy in the other two cases, with marked benefit.

MR. PRIESTLY SMITH (Birmingham) thought the affection a difficult one to define. It was probably allied with episcleritis, with urticaria, with hay fever and herpes. In addition to the local cause there was often a systemic cause present as well—gout, rheumatism, or faulty elimination of some kind. He advocated systematic drinking of hot water in the morning and at night, as useful in eliminating waste products and removing the tendency to congestive states.

MR. CRITCHETT thought these cases were probably of rheumatic origin. He found great benefit resulted from salicin and quinine, hot water internally and lamp baths.

[TO BE CONTINUED.]

SELECTIONS.

HYSTERICAL AMBLYOPIA AND AMAUROSIS. REPORT OF FIVE CASES TREATED BY HYPNOTISM.[1]

BY J. ARTHUR BOOTH, M.D.,

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We may define hysteria to consist of such a condition of the general nervous system, original or acquired, as renders it capable of simulating most local diseases; of complicating them in their progress and modifying them in their usual phenomena. The number of derangements and diseases which hysteria is capable of simulating is well known; but defective vision is one of the less familiar forms, and so I take the opportunity to direct your attention to this subject; at the same time reporting a few cases, which may prove of some interest.

This special form of functional trouble, not due to alcohol or tobacco, is, by no means, a common one; this is especially true in regard to the cases of amaurosis; those of amblyopia and narrowing of the fields of vision being more frequently met with.

The onset of the disturbance is usually sudden, and generally follows some shock, either mental or physical. In attempting to examine the eye there is a spasmodic contraction of the orbicularis muscle which is increased on exposure to a

[1]Read before the American Neurological Association, Boston, June, 5, 1895.

bright light, at the same time causing a sense of anxiety, profuse lachrymation, and a spasmodic closure of the lid of the eye. The globe itself does not present anything abnormal, except that in a certain number of cases one may find some anæsthesia of the cornea. (This was a marked symptom in one of my cases, Case IV). The pupils are equal and react readily and normally. The media, lens, vessels, and fundus are normal, so that the local examination does not lead to any knowledge of the pathological nature of the other symptoms which one learns from the patient. Question the patient, and she complains of defective vision, pain either ocular or supra-orbital, and great sensibility to light. There may be absolute loss of sight, generally in one eye, or only amblyopia and a reduction of the field of vision to a small area around the fixation point. Besides the above we find the local and general symptoms of hysteria, viz.: a circumscribed pain over the brow, a globular sensation in the throat, excitability and irritability of the nervous system, palpitation of the heart, a tendency to laugh and cry without cause, irregular, painful, or absent menstruation.

The following cases were referred to me by Dr. David Webster, and well illustrate the above objective and subjective symptoms.

CASE I. *Amblyopia and Contraction of the Fields of Vision. Vision Restored in Twelve Séances.*—Kate T., eighteen years of age, was seen for the first time on June 12, 1894, when the following history was obtained: She had always been nervous, but otherwise had had no trouble until the appearance of menstruation two years ago; then, during the first year she suffered much pain each month. For the past year menstruation has come on at irregular intervals, and has now been absent for two months. Within the last six months the patient has become very depressed and emotional, and she has also had two convulsive seizures of a hysterical nature. One month ago a brother committed suicide, and it was shortly after this that she first noticed failure of vision; at times becoming entirely blind; this latter condition only lasting a few seconds. Exam-

ination does not reveal any organic lesion of the nervous system. Any attempt to examine the eyes causes a spasmodic closure of the lids. Both pupils are moderately dilated and react normally. The vision of the right eye is $^{20}/_{XV}$, and of the left eye $^{20}/_{XL}$. Both fields of vision are very much contracted.

The fundus, media, and vessels are normal, nothing being found to account for the condition present. Two attempts to hypnotize the patient failed, but on the third trial she passed into a deep sleep, and suggestions referable to the conditions present were made. After seven séances, the fields were again measured and a marked improvement was found.

The treatment by suggestion was continued until August 15, when the patient was discharged with perfectly normal fields and vision fully restored.

CASE II. *Amblyopia. Contraction of the Visual Fields. Improvement after Six Séances.*—March 29, 1895. Charles T., aged twenty-eight, single; clerk. General health good up to eighteen months ago; then after some business troubles and excesses, he became depressed, nervous, and could not sleep. Six months ago he noticed that he was having periods of temporary blindness, these only lasting for a second or two. Three months later his vision became blurred, and this condition has remained up to the present time. He has never had any diplopia. Within the last month there has been more or less frontal and occipital headache, and lately he has become very emotional. Sometimes he gets confused and can not remember dates, otherwise his memory is good. The urine has been examined several times and always found to be normal. At one time he had herpes preputialis, and being told that it was due to a syphilitic infection, thought all his symptoms were caused by this disease.

Examination.—Stands well with eyes closed. Knee-jerks high but equal. Grasp of hands as shown by the dynamometer: R. $^{30}/_{XL}$; L. $^{40}/_{XXXIX}$. Tongue straight; speech normal. Pupils equal, of medium size, and active. The ocular muscles thoroughly tested with prisms, do not show any degree of pa-

resis. The optic nerves and retinal vessels appear perfectly normal. Both visual fields are very much contracted.

There is no loss of color perception. The left side, including the cornea, is slightly anæsthetic, and he now states that he occasionally has a temporary feeling of weakness in the leg and arm of this side. Examination does not reveal the slightest loss of power: all the muscles are firm and react normally to both the faradic and galvanic currents. He was hypnotized without any difficulty, and the proper suggestions were then made. This method of treatment was continued for two weeks, resulting in a complete disappearance of many of the symptoms complained of. The visual fields were again measured, and though some improvement was shown, still there remained a certain amount of contraction.

On April 12, he stated he had been having more or less pain in his abdomen for several days, and that this morning he he had passed some white objects at stool. Upon examining these, they were found to be a number of the links of tænia solium. A mixture of castor-oil and filix mas was ordered, with directions as to diet, etc.; which resulted in the passing of two worms, many yards in length, including the heads. Three days later his eye symptoms had all disappeared, the visual fields were entirely normal, and have remained so up to the present time.

CASE III. *Monocular Blindness. Cure in Five Séances.*—Fannie T., aged thirty-eight, married. Seen November 23, 1892. She was perfectly well until one month ago, about which time she became depressed; could not attend to her household duties and had a number of crying spells. Three weeks later pain appeared in the left eye, accompanied by some blurring of vision, which gradually increased, and now for the past three days there has been complete blindness in this eye. No vomiting, diplopia, or vertigo. There is no history of rheumatism, malaria, or any serious illness, having always enjoyed good health up to the time of the present trouble. She had three healthy children and has had no miscar-

riages. Careful inquiry does not reveal any history of syphilitic infection. Bowels and menses are regular.

Examination.—There is a complete loss of vision in the left eye: she fails to recognize any object held before it, the right eye being covered. Vision in the right eye normal. Pupils normal in size and active: no ocular paresis. On exposing the eyes to a bright light there is a certain amount of photophobia. The ophthalmoscope shows nothing abnormal either in media, disk, or vessel. With the exception of a slight amount of anæsthesia of the cornea, there were no other sensory changes. The patient was easily hypnotized, and the necessary suggestions having been made, she was awakened after sleeping ten minutes. The right eye was then covered and the left again tested. Vision was about the same, but she volunteered the statement that there was less blur, and the pain had disappeared.

November 25. No change; condition the same. Vision again tested as before and with the same results. She complains of a good deal of pain in the left eye and face. I hypnotize her and suggest that she will have no more pain; that the rest will do her good and that she will now see. In fifteen minutes she sits up on the couch, and placing one hand over the right eye, recognizes a clock on the wall twelve feet distant, although she is unable to distinguish the hands or tell the time. A bunch of keys, a knife, and a silver half-dollar are named correctly at four feet. The pain is entirely gone.

December 7. Patient reports that she is now able to see much better, also that the pain has been absent since the last séance. She sees well at ten feet, but beyond this everything looks blurred. Séance repeated.

December 9. Has been perfectly well: no pain. Vision entirely restored.

CASE IV. *Monocular Blindness. Cure in Nine Séances.*—On September 12, 1894, the patient was referred to me by Dr. Webster with the following note: "I see no sufficient ophthalmoscopic reason for the loss of all but perception of light of this young woman's left eye. If you can find no lesion of the

brain to cause the blindness perhaps you can restore the sight by hypnotism as you did before."

Mary C., aged eighteen, married. The patient is an Armenian and can not speak a word of English, but her physician is present and acting as interpreter, the following history is obtained: Has been married five years; two children and no miscarriages; is now nursing an infant eight months old. Was fairly well up to the past month; during this time she has become depressed, emotional, and has often complained of a lump rising in the throat. A few days ago she had some headpain, and with its appearance she noticed failure of vision in the left eye, and now the patient can not distinguish any object at any distance far or near, but she can make out the difference between light and darkness. She is poorly nourished and anæmic. Mucous membrane of lips, gum and conjunctivæ pale. Both pupils moderately dilated, the left not reacting as actively as the right. Fundus entirely normal. Failing to find any evidence of organic trouble, the diagnosis of a functional amaurosis was made and I decided to try suggestion for its relief. The patient not being able to understand English, I was not successful in the first attempt to hypnotize her; but through the aid of Dr. Aterian I learned the proper Armenian words necessary for the purpose and was successful at the third séance in obtaining a deep hypnotic sleep. Complete recovery took place in nine séances.

CASE V. *Monocular blindness. Unimproved.*—This patient had been under the care of Drs. Boynton and Palmer at the Ophthalmic Hospital, and was finally referred to Dr. Webster, through whose kindness I saw the case on February 4, 1895. Although there does not seem to be any doubt in my mind as to the trouble being a functional one, all methods of treatment have proved ineffectual. The following is the history:

Agnes L., fourteen years of age; single. She was perfectly well up to one year and a half ago; about this time she fell on the ice, striking the back of her head. She was much frightened and jarred, but did not vomit or lose consciousness. Menses appeared for the first time shortly after this, but have

never been regular, two months having now elapsed since the last period. Two months after the accident above referred to, the patient commenced to have headache, chiefly frontal, but sometimes in occiput and back of neck. On May 5, 1894, she came under the care of Dr. Boynton, at the Ophthalmic Hospital, for dimness of vision. Examination revealed almost total loss of vision in the right eye, without any change in the fundus, vessels, and disk; all being found normal. While in the hospital she had two epileptoid attacks, hysterical in character, and she also had frequent crying spells. Thorough treatment with strychnia, glonoin, iron, and the valerianates caused no improvement.

Examination.—There is a complete loss of vision in the right eye. Left vision is $^{15}/_{\infty}$, brought up to normal with proper glass. Field much contracted in all directions. In a moderate light, both pupils dilated, the right being a little the larger. Reflex through the right retina not as good as through the left. When one illuminates the left retina, the right pupil does not remain contracted as long. With direct illumination the reaction is about the same. There is a marked loss of sensation of the cornea of the right eye, but no anesthesia of face, body, or extremities. The patient recognizes colors readily. The knee-jerks are exaggerated but equal. The question of simulation was considered, but repeated tests by prisms and other means gave negative results. Treatment by means of drugs having failed to change the conditions present, hypnotism and metallo-therapy were tried, but both failed to influence the patient in any way.

Prognosis and Diagnosis.—From the facts brought out in the above histories, we see that an amblyopia, or amaurosis from hysteria, may be slight in form and transitory in duration, or very severe; sometimes tardy in its progress and prolonged in its existence. If the condition should persist for any length of time and an alteration of nutrition or any morbid formative process be set up by the prolonged functional disturbance, then it is probable that finally the condition would change into an amaurosis from inflammation and congestion. The latter

condition; I now believe, is taking place in Case V., which illustrates well this type of the disease.

The diagnosis is based on two points, viz.: the absence of any demonstrable changes in the eye, and the lack of that agreement between the individual symptoms constituting the disturbance of vision which under other circumstances they would exhibit. Persons whose visual fields are unusually contracted still move with perfect security, without stumbling, in a space which is not well known to them. The only difficulty in diagnosis exists in those cases where a line must be drawn between true simulation and a hysterical blindness, that is, one having an actual existence in the imagination. It is not that they will not, but they can not will. The retina receives the impression, but through some fault of the higher cortical centers, perhaps by inhibition, the patient remains unconscious of it.

Treatment.—Besides the measures usually recommended in the treatment of these disorders—the internal administration of strychnia, iron, etc.—I wish to urge the trial of hypnotism, and I do not do this from any optimistic point of view.

A great many of us are prone to look upon this entire subject as either belonging to the domain of quackery, or believing that it requires some special power hesitate to take advantage of this method of treatment. The time has how passed for any such argument, and any physician who would take the trouble to study the subject would obtain satisfactory results in a certain number of cases. The manner of procedure in producing hypnosis is given in detail in current literature, so that it does not seem necessary to dwell upon this part of the subject here, except to state that the fixation method is the one generally employed.

From the results obtained in the cases just submitted, the following conclusions may be drawn, viz.:

1. We possess in suggestive therapeutics an important aid in the treatment of certain morbid conditions, but just how valuable this may be, can not be estimated until it is more generally used and the results reported.

2. The results of this method are sufficient to stimulate the profession to further use of it.

3. Instead of waiting and trying other methods first, thus allowing the disease to exist for a certain time, I would recommend the trial of hypnotism in the first place. Two of the cases already reported had been treated by other measures for some time without success.

4. The use of hypnotism by the intelligent physician, in the cure of certain morbid conditions, does not produce any bad effects, notwithstanding reports to the contrary.—*Medical Record.*

OBITUARY.

HENRY W. WILLIAMS, A.M., M.D. +

This eminent ophthalmologist and author, whose fame was not confined to this country, but extended throughout Europe, has been a conspicuous professional figure for many years. He was born in Boston, on December 11, 1821, and Boston continued to be his home during his whole life. He was educated in the schools of his city and prepared to enter Harvard College at the Latin School. His health, however, was so poor that he did not enter college. He took up mercantile pursuits instead, but these became distasteful to him and he soon abandoned them and began the study of medicine. He attended lectures at the Harvard Medical School and graduated in 1849. He then went to Europe for three years, following the various hospitals and the services of distinguished practitioners in Berlin, Heidelberg, Zürich and Paris. Much of his time was spent in the latter city, and it was here that he became especially interested in diseases of the eye. On his return to Boston he began the practice of medicine in all its various departments. Ere long, however, he drifted into his chosen specialty and was soon prominent as an ophthalmic surgeon. In 1864, the Boston City Hospital was organized and he was made its ophthalmologist, a position which he held till 1891, when by reason of ill-health, he resigned and was made consultant. In 1847, he was foremost in establishing the Massachusetts Medical Benevolent Society, which was designed for the relief of professional men and their families. He was afterward its President for many years. He was an active Fellow of the Massachusetts Medical Society from 1849 and was its President in 1880 to 1882. He was also an early member (1864) of the American Ophthalmological Society and

was its President in 1869, 1870, 1871 and 1872. Harvard, in 1868, conferred upon him the honorary degree of A.M. Three years later he was made an honorary member of the Phi Beta Kappa Society. In 1868, also, he won the Boylston prize for an essay entitled "Recent Advances in Ophthalmic Science." The year was made still more eventful to him by a call which he received from Harvard Medical School to the chair of Ophthalmology. This position he occupied for twenty-two years, after which, on account of ill-health, he retired. But on his retirement he endowed the chair generously.

He was the author of numerous writings, among which are: "Our Eyes and How to Use them"; "Recent Advances in Ophthalmic Science," and "Diagnosis and Treatment of Dis eases of the Eye." His last public appearance of note was, last spring, before the American Academy of Arts and Sciences, of which he was a member, when he read an obituary of the late von Helmholtz.

Dr. Williams was a man of large stature and strong character. He was an excellent teacher, being clear, forcible and persuasive in his speaking. As an operator on the eye, he was ambidextrous, and is said to have had few equals. He achieved great success in his profession, and was an example worthy of imitation in his untiring patience, punctuality and conscientious devotion to duty.

Dr. Williams died at his home, 15 Arlington Street, Boston, June 13, 1895, after a very short illness. He leaves a widow, one daughter and six sons, three of whom are in the medical profession. One of the latter, Dr. Charles H. Williams, is well known as an ophthalmic practitioner and assisted in the revision of the enlarged edition of his father's work on diseases of the eye, one of the best manuals on the subject which has ever emanated from the American profession.

The remains of Dr. Williams were tenderly borne to their last resting place by his sons. Thus closes the chapter in the life of another one who has made invaluable contributions to the world and left an indelible impress upon this generation by his example and his works.